

## ABSTRACT OF THE DISCLOSURE

A distributed system and method usable by multiple and concurrent users for decoding telecommunication tracer information originating from any  
5 telecommunication network element and utilizing any industry standard or proprietary telecommunication protocol. The distributed system can include a plurality of integrated trace analysis system application servers, each providing a CDL based decoding service, an encoding sub-system used to encode each telecommunication protocol into executable CDL programs or catalogs, and a decoder engine that uses  
10 signatures to determine the telecommunication protocol associated with each event in the trace data and invoke the appropriate executable CDL program to decode the tracer event. This set of decoding services coupled with administrative services comprises an integrated trace analysis system (or iTAS) engine that executes on the application server(s). A plurality of client workstations connected to the distributed  
15 network each have a browser based graphical user interface that displays the decoded output results from the decoder engine and is also used for administration of the system. Further, the application servers can be configured to reside in a particular domain and each application server within that domain can be administered from any of the client workstations in the domain.